

# Isometries of five-branes and T-duality

Musaev E.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

---

## Abstract

© The Authors, published by EDP Sciences, 2018. T-duality chain starting from the NS5-brane is known to generate exotic backgrounds. These have been described as a DFT background whose orientation in the doubled space defines specific 10-dimensional solutions. The focus of this letter is at isometries of the corresponding background, their relation to the NS five-brane charge and the section constraint of DFT. This letter is based on the talk presented by the author at the conference QUARKS'18.

<http://dx.doi.org/10.1051/epjconf/201819106009>

---

## References

- [1] R. G. Leigh, Mod. Phys. Lett. A4, 2767 (1989)
- [2] J. Polchinski, Phys. Rev. Lett. 75, 4724 (1995),. hep-th/9510017
- [3] N. Obers, B. Pioline, Phys. Rept. 318, 113 (1999),. hep-th/9809039
- [4] J. de Boer, M. Shigemori, Phys. Rept. 532, 65 (2013),. 1209. 6056
- [5] A. Kleinschmidt, JHEP 10, 144 (2011),. 1109. 2025
- [6] E. A. Bergshoeff, F. Riccioni, JHEP 05, 131 (2011),. 1102. 0934
- [7] J. Shelton, W. Taylor, B. Wecht, JHEP 0510, 085 (2005),. hep-th/0508133
- [8] B. Wecht, Class. Quant. Grav. 24, S773 (2007),. 0708. 3984
- [9] D. Tong, JHEP 07, 013 (2002),. hep-th/0204186
- [10] J. A. Harvey, S. Jensen, JHEP 10, 028 (2005),. hep-th/0507204
- [11] T. Kimura, S. Sasaki, JHEP 08, 126 (2013),. 1305. 4439
- [12] T. Kimura, S. Sasaki, K. Shiozawa, JHEP 07, 001 (2018),. 1803. 11087
- [13] A. A. Tseytlin, Phys. Lett. B242, 163 (1990)
- [14] W. Siegel, Phys. Rev. D48, 2826 (1993),. hep-th/9305073
- [15] O. Hohm, C. Hull, B. Zwiebach, JHEP 1008, 008 (2010),. 1006. 4823
- [16] I. Bakhmatov, A. Kleinschmidt, E. T. Musaev, JHEP 10, 076 (2016),. 1607. 05450
- [17] D. S. Berman, F. J. Rudolph, JHEP 05, 015 (2015),. 1409. 6314
- [18] C. D. A. Blair, E. T. Musaev, JHEP 03, 111 (2018),. 1712. 01739
- [19] S. Jensen, JHEP 1107, 088 (2011),. 1106. 1174
- [20] E. A. Bergshoeff, F. Riccioni, Phys. Lett. B704, 367 (2011),. 1108. 5067
- [21] A. A. Golubtsova, E. T. Musaev (2018),. 1806. 02297